

CLAIMS

1. A shaft clamp assembly comprising a bracket having a tubular member adapted to receive a shaft, means for mounting the tubular member to a structure, and clamping means, the clamping means being operable to secure the shaft to the tubular member, and wherein the internal wall of the tubular member is provided with at least two shaft contact surfaces, their arrangement being such that a polygon of forces is generated between the clamping means and the shaft contact surfaces to secure the shaft to the tubular member when the clamping means is operated.
2. A shaft clamp assembly as claimed in claim 1, wherein the polygon of forces is a triangle of forces.
3. A shaft clamp assembly as claimed in any preceding claim, wherein the tubular member comprises a tube having a substantially triangular cross section.
4. A shaft clamp assembly as claimed in claim 3, wherein the radius of each apex of the substantially triangular cross section is less than the radius of a shaft which is to be supported by the shaft clamp assembly.
5. A shaft clamp assembly as claimed in any preceding claim, wherein the clamping means includes at least one mechanism which is adapted to exert pressure on the shaft to push the shaft into contact with at least two contact surfaces on the internal wall of the tubular member.
6. A shaft clamp assembly as claimed in any preceding claim, wherein the tubular member is provided with reinforcing members.
7. A shaft clamp assembly as claimed in claim 6, wherein the shaft contact surfaces are provided with reinforcing members.
8. A shaft clamp assembly as claimed in claims 6 or 7, wherein the reinforcing members form part of the means for mounting the tubular member to a structure.

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9. A shaft clamp assembly as claimed in any preceding claim, wherein the clamping means includes at least one threaded shaft or rod, which is adapted to engage with a mating thread associated with the tubular member.
- 5 10. A shaft clamp assembly as claimed in claim 9, wherein the thread associated with the tubular member further passes through one of the reinforcing members.
11. An item of furniture, incorporating a shaft clamp assembly substantially as specified herein.